InSight Archive Status

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InSight Archive Development Schedule

Start	End	Task
7/23/2014	1/31/2015	Teams prepare first drafts of SISs, PDS labels
2/1/2015	3/31/2015	Teams prepare review-ready EDR SISs, sample products, PDS labels
4/1/2015	6/30/2015	PDS conducts EDR peer reviews
	7/1/2015	EDR peer reviews are complete
	8/18/2015	GDS 4.0 freeze
	3/8/2016	Launch
	9/20/2016	Landing

- Teams that delegate EDR production to MIPL may have a different schedule (cameras, Auxiliary Payload Sensor Subsystem (APSS)).
- The RDR schedule is TBD; some teams may do RDRs at the same time as EDRs.

InSight Archives

Instrument		Team Rep	PDS Curator
HP3 / RAD	Heat Flow and Physical Properties Package / Radiometer	Matthias Grott, Troy Hudson, Nils Mueller (DLR)	Geosciences
SEIS	Seismic Experiment for Investigating the Subsurface	Philippe Lognonné (IPGP), Renee Weber (MSFC)	Geosciences
IDA	Instrument Deployment Arm	Ashitey Trebi-Ollennu, Julie Costillo (JPL)	Geosciences
IDC, ICC	Instrument Deployment Camera, Instrument Context Camera	Justin Maki, Payam Zamani (JPL)	Imaging
APSS / TWINS	Auxiliary Payload Sensor Subsystem / Temperature and Wind for InSight	Don Banfield (Cornell), Luis Mora (CAB)	Atmospheres
MAG	Magnetometer	Chris Russell (UCLA)	PPI
RISE	Rotation and Interior Structure Experiment	Sami Asmar (JPL)	Geosciences
SPICE		NAIF	NAIF

InSight Data and Archive Working Group (DAWG)

- Led by Sue Smrekar, InSight Project Scientist, and Susie Slavney

- Usually meets monthly

- Password-protected web site tracks meetings, action items, documents, members

- Contact Slavney if you want access

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Heat Flow and Physical Properties Package / Radiometer (HP³/ RAD)

- Draft SIS describes raw, calibrated and derived data products; includes detailed instrument descriptions.
- Draft label examples for all products types are in progress. Team has asked whether PDS will provide a tool to generate labels from a template.
- Team is working to define instrument-specific label parameters to be included in InSight Data Dictionary.
- Work is on schedule.

Seismic Experiment for Investigating the Subsurface (SEIS)

- Draft SIS describes raw data. Calibrated and derived data are TBD.
- Draft labels are in progress for raw data in ASCII table format and in SEED format. Team has asked whether PDS will provide a tool to generate labels from a template.
- Team is working on instrument description and instrument-specific label parameters for InSight Data Dictionary.
- Work is on schedule.

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Instrument Deployment Arm (IDA)

- There is uncertainty about whether some IDA products are ITAR-restricted.
- Arm Lead is often difficult to reach. Julie Costillo has been added to the DAWG to share archiving tasks.
- On schedule? Hard to tell.

Instrument Deployment Camera, Instrument Context Camera (IDC/ICC)

•Draft Camera SIS and Camera Archive Bundle SIS are in progress.

•Detailed analysis of PDS4 attributes to describe the camera products is underway. Updates are needed for Geometry, Imaging, and InSight mission dictionary.

- In the absence of official (Geometry WG approved) lander dictionary, Imaging Node recommends the InSight/MIPL development team proceed with the GEOML dictionary provided by Elizabeth Rye.

•The project's GDS delivery schedule will be impacted due to a slip in the instrument delivery from contractor.

- It is not yet known when cameras will be available to begin generating test data, thus an updated GDS schedule hasn't been defined yet.
- For now, we're maintaining our current schedule for archive development and peer review, but it's likely to change.

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Auxiliary Payload Sensor Subsystem / Temperature and Wind for InSight (APSS/TWINS)

- Draft SIS for raw data products is in progress.
- Atmospheres Node prepared PDS4 label template based on the MSL REMS PDS3 label and sent it to the instrument team.
- Work is on schedule.

Magnetometer (MAG)

- Chris Russell says the January 31 due date for draft SIS and labels will be met, although currently the team members are busy with DAWN.

Rotation and Interior Structure Experiment (RISE)

- RISE data are raw radio science data in DSN TRK-2-34 format. The SIS for this data already exists, produced by DSN.
- The team will rearrange the records in the DSN file so that all records of the same type are grouped together, to allow the file to be described by a PDS4 label.
- With help from the Engineering Node, the RISE team has created a PDS4 label that describes the rearranged file.
- An example label exists, but how to determine if it correctly describes the data file? Too complicated to verify by hand.

Issues

- Camera hardware and flight software delivery schedule is unknown, which impacts the PDS4 label design, finalization of Camera SIS, MIPL software delivery, and generation of test products. Existing test products have limited value because camera design has changed from monochrome to color.

- Instrument Deployment Arm archive is on hold waiting for products to be defined and determined to be ITAR-safe.

- PDS4 tools are needed:
  - Bulk label generation from template
  - Validation to determine whether label correctly describes data product